

# LITERATURE REVIEW

AUGUST  
2024



**COVVT**

CENTER FOR RESEARCH ON  
College-Workforce Transitions

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A Literature Review  
of the Research on  
College Internships  
from 2021-2023:  
Focusing on Equity &  
Quality During the  
Pandemic Era



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## Abstract

Internships are increasingly recognized as a critical component of higher education, offering students essential opportunities for career development and professional growth. However, persistent questions remain regarding access to internships, the structure and quality of these experiences, and the need for updated literature reviews to address recent issues in the field. This report presents a literature review of studies published between 2021 and 2023, building upon prior reviews by the Center for Research on College-Workforce Transitions (CCWT). The findings highlight ongoing challenges in accessibility and racial and gender dynamics, the diverse impacts of the COVID-19 pandemic on internship formats, and the varying outcomes of internships based on factors such as supervisor support, task relevance, and social interaction. Recommendations for future research and practice are provided to enhance the effectiveness and equity of internships.

**Keywords:** College Internships, Post-pandemic, Accessibility, Racial and Gender Dynamics, Virtual Internships, Labor Market Outcomes, Supervisor Support, Task Complexity

## Introduction

Internships play a pivotal role in the educational journey and career preparation of college students (Baert et al., 2021; Bolli et al., 2021). They offer students a glimpse into the professional world, providing opportunities to apply theoretical knowledge in practical settings and to understand the sociocultural understanding of the workplace (Di Meglio et al., 2022; Kim et al., 2022; McHugh, 2017). As a result, internships are increasingly emphasized in academic advising and career services, underscoring the need for a comprehensive understanding of what makes these experiences effective and equitable (Hora et al., 2021).

Given the growing focus on internships in higher education, there is a corresponding increase in empirical research examining their impacts (e.g., Jaeger et al., 2023; Teng et al., 2022). However, while some literature reviews exist (e.g., Hora et al., 2017), there has been no comprehensive synthesis of studies conducted since the COVID-19 pandemic, a period that has seen significant shifts in how internships are structured and experienced. A new literature review is needed to provide both scholars and practitioners with an updated understanding of internships in the post-pandemic landscape.

To address this gap, this literature review examines several key aspects of internships: the challenges students face, such as accessibility, the factors influencing internship quality, the evolving landscape of internships, and the outcomes students achieve. Accessibility remains a significant concern, as many students encounter barriers such as socioeconomic constraints, lack of industry connections, and geographical limitations that prevent them from securing internship opportunities (Clarke, 2018; Hora et al., 2021). Even when students do secure internships, the quality of their experiences can vary widely based on the nature of the tasks assigned, the level of mentorship provided, and the overall work environment (Lin & Chen, 2022; Wolinsky-Nahmias & Auerbach, 2022). The pandemic has further complicated these dynamics, introducing virtual and hybrid internship formats that have diversified student experiences (Jenkins et al., 2023; Ruppert et al., 2023) and, in some cases, increased accessibility (Lin & Wang, 2023; Reid et al., 2023).

The outcomes of internships are equally diverse, ranging from positive impacts such as enhanced professional skills and increased probability to get employed (Baert et al., 2021; Tu, 2022) to negative experiences stemming from unpaid positions, lack of meaningful work, or inadequate supervision (Hora et al., 2017; 2023). These mixed outcomes underscore the need for careful design and implementation of internship programs to maximize their benefits and minimize potential drawbacks.

Given these complexities, this review aims to identify the traits and factors that influence the quality and effectiveness of internships. By synthesizing recent empirical studies from 2021 to 2023, this review seeks to bridge the gap in our understanding of internships in the post-pandemic context. Specifically, it will explore trends and key issues in recent internship studies, focusing on the varied experiences of college students and the characteristics of internships that affect their outcomes.

Based on this rationale, this literature review addresses the following research questions:

1. What does the literature say about the varied experiences of college students regarding their participation in internships?
2. What does the literature say about the impacts of the internships on educational and career-related outcomes?
3. What does the literature say about the key factors that make a positive or negative contribution to internship experience?

## Bibliographic Methods

This review synthesizes the findings from twenty-nine academic papers. An initial search yielded 147 articles using terms such as “internship,” “higher education,” “college students,” and “empirical” on platforms like ERIC, UW Madison Library, Springer, and Google Scholar. The search was limited to articles published in English between 2021 and 2023, and duplicates were removed. Articles were selected based on the following criteria: (1) empirical research nature, (2) presence in peer-reviewed scholarly journals, and (3) focus on internships designed for college students. Additional sources were identified through manual reference checks in the key articles. Studies that did not meet these criteria were excluded, particularly those that were purely theoretical or conceptual, focused on non-higher education internships (e.g., vocational training programs), or lacked sufficient methodological detail to assess the validity of their findings. Non-peer-reviewed literature such as self-published instructional materials, policy assessments, and other analyses was also excluded from this review.

Key information was extracted from each eligible study, including the study’s aims, research questions, methodology, sample characteristics, main findings, and conclusions. The studies were then categorized into five distinct groups based on their primary focus, as identified by the authors' main emphasis. While some studies addressed multiple areas of inquiry, their placement was determined by the primary emphasis of the authors, consistent with their conclusions and political implications.

During the analysis phase, the findings within each category were synthesized to identify common themes and trends in the literature. This process involved a detailed examination of how different studies approached similar questions and the consistency of their findings. By comparing the results, comprehensive conclusions about the current state of research on internships were drawn, and future research directions were suggested.

## What do Studies Say about Internships?

We first grouped recent empirical research on internships published from 2021 to 2023 into five distinct categories (refer to Table 1), addressing the research questions. This helps us outline the most prevalent topics explored and offer a glimpse into current interests in the internship field. As shown in Table 1, these categories are: Issues on equity and inclusion; Various types of internships; Positive outcomes of internships; Negative outcomes of internships and Key factors that affect internship experience.

**Table 1. Types of research questions and/or topics addressed in the literature**

Research Questions/Topics		Number of Papers	Examples
1. What does the literature say about the varied experiences of college students regarding their participation in internships?	Issues on equity and inclusion <ul style="list-style-type: none"> <li>• Low Accessibility</li> <li>• Racial and Gender Dynamics</li> </ul>	8	Hora et al. (2022); Jaeger et al. (2023); Lapan & Smith (2023)
	Various types of internships <ul style="list-style-type: none"> <li>• Virtual Internships</li> <li>• Internships across Different Majors and Institutional Context</li> <li>• International Internships</li> </ul>	10	Di Pietro (2022); Mato-Díaz & Escudero-Castillo (2023); Teng et al. (2022)
2. What does the literature say about the impacts of the internships on educational and career-related outcomes?	Positive outcomes of internships <ul style="list-style-type: none"> <li>• Employment Opportunities</li> <li>• Skill Development</li> <li>• Higher Income</li> </ul>	5	Baert et al. (2021); Sekiguchi et al. (2022)
	Negative outcomes of internships <ul style="list-style-type: none"> <li>• Weak Long-Term Effects on Wages</li> <li>• Risk Management</li> </ul>	2	Di Meglio et al. (2022); Odlin et al. (2022)
3. What does the literature say about the key factors that make a positive or negative contribution to internship experience?	Key factors that affect internship experience <ul style="list-style-type: none"> <li>• Supervisor Support</li> <li>• Social Interaction</li> <li>• Challenging Tasks</li> </ul>	4	Lin & Chen (2022); Okolie (2022)

An overview of our categorized findings and their analytical strategies is presented in Table 2, highlighting the diverse nature of recent empirical research on internships and the various dimensions explored by scholars in this field. Among twenty-nine articles, fifteen studies (52%) used quantitative methods, ten studies (34%) being qualitative and four studies (14%) being mixed methods.

**Table 2. Twenty-nine studies in our review**

No.	Author	Key Results	Analytical Strategy	Data & Sample
<b>Issues on equity and inclusion (8)</b>				
1	Hora et al. (2022)	Low accessibility affected by gender, academic major, socioeconomic status, and race intersect with organizational (e.g., insufficient information) and contextual (e.g., labor markets) factors	Mixed-method: Inductive thematic, correlational, and social-network analysis techniques	Latinx students attending Hispanic-Serving Institutions: Survey (n = 192) and focus group (n = 12)
2	Hora et al. (2021)	The role of financial, social, and cultural capital impacted students differentially depending on their majors, socioeconomic status, race, and geographic location, highlighting context and enduring systemic forces	Mixed-method: Inductive thematic analysis, social network analysis, and logistic regression techniques	Students attending five postsecondary institutions: Survey (n = 1,549) and focus group and interview (n = 100)
3	Jaeger et al. (2023)	Employers reacting more favorably to internship candidates who have prior internship experience. Lower likelihood of employers responding to applicants with names that sound Black, and also to those who are geographically far.	Mixed-method: Using ads from an internship-specific website, résumé audit study	11,000 applications
4	Lapan & Smith (2023)	While internships largely affirmed women’s career interests in CS, participants also navigated challenging gendered dynamics and often made career decisions directly influenced by these experiences.	Qualitative: Thematic analysis	Interviews from thirteen women in Computer Science majors with internship experience
5	Moss-Pech (2021)	Communications and English majors face challenges such as lower earnings, fewer jobs matching their degrees, a higher rate of unemployment, and a longer time to secure entry-level work compared to Business and Engineering graduates.	Qualitative: Longitudinal interviews with students across four majors	Ninety-one seniors who have all completed internships
6	Renschler et al. (2023)	Understanding the barriers to secure internships and adopting detailed curricular and structural support changes to overcome these obstacles is imperative, resulting in improved student perceptions and outcomes.	Quantitative: Experiment, mean differences	Eighteen students who completed an inclusive internship program
7	Shandra (2022)	Significant and sustained inequalities for lower income students, first-generation students, public school students, and students from less selective schools	Quantitative: Descriptive analysis and visualization	Baccalaureate graduates: College Senior Survey

**Table 2. Twenty-nine studies in our review (continued)**

No.	Author	Key Results	Analytical Strategy	Data & Sample
Issues on equity and inclusion (8) (continued)				
8	Wojcik et al. (2023)	A greater percentage of SETs of color participated in AR programs compared to traditional licensure programs.	Quantitative: Mean differences	19,878 special education teachers
Various types of internships (10)				
9	Di Pietro (2022)	Intrapersonal skills (e.g., open mindedness, self-confidence) are found to be the most frequently cited skills learned by participants, including practical knowledge and language proficiency.	Qualitative: Systematic, thematic, and content analysis	Thirty-one relevant studies
10	Hermann et al. (2021)	International business internships should help students to self-scope and connects based on their theoretical knowledge from other courses.	Qualitative: Pedagogical action research	Thirteen semi-structured interviews from international business internship participants in a Norwegian-Brazilian context
11	Jenkins et al. (2023)	Virtual internships can be highly successful component of student learning.	Quantitative: Descriptive analysis and visualization	165 students who completed e-internships
12	Mato-Díaz & Escudero-Castillo (2023)	Estimated effects are positive and significant for participants in private firms' internships, and negative and significant for interns who worked in public organizations.	Quantitative: Counterfactual analysis and Medium-term analysis	Matching intern groups of either type with a control group formed from candidates who ended up without an internship
13	Mensah et al. (2023)	Research efforts have focused on internships and students' attitudes toward hospitality work, benefits of internships to students, industry and institutions, and internship satisfaction.	Qualitative: Bibliometric and Integrative Review	167 articles retrieved from Scopus database published between 1986 and 2020
14	Reid et al. (2023)	Virtual internship has been successful from both intern and supervisor perspectives, providing flexible and supportive opportunities which help interns to develop transferable skills and confidence.	Qualitative: Thematic analysis	Seventeen virtual interns and their supervisor interviews, Focus group interviews
15	Ruppert et al. (2023)	Student experiences in STEM internships vary across workplace community and culture and are discussed in the context of scaffolding of student internships in intrapersonal, interpersonal, and cognitive domains.	Qualitative: Thematic analysis	Interviews with TRENDS program participants, daily and final reflections, and workplace artifacts



**Table 2. Twenty-nine studies in our review (continued)**

No.	Author	Key Results	Analytical Strategy	Data & Sample
<b>Various types of internships (10) (continued)</b>				
16	Snodgrass et al. (2021)	Findings indicated significant growth in participants' cultural intelligence. The intentional incorporation of experiential learning principles in the design and implementation of internship abroad programs has clear potential to increase participant' intercultural competence and develop their skills for the 21st century workplace.	Quantitative: Mean differences	Participants were scored on the Cultural Intelligence Scale (CQS) before and after the internship, and pre-test and post-test scores were compared and analyzed
17	Teng et al. (2022)	Supervisors and e-interns reported high levels of satisfaction and documented learning gains such as the development of technical skills and soft skills unique to remote work.	Mixed-method: Chi-square and Fisher's exact tests, thematic analysis	Data were triangulated from public health interns' surveys and module evaluation reports in Singapore
18	Wilson et al. (2023)	It highlights benefits to the intern, including the adaptability of the hybrid program, learning in multiple formats, and opportunities for networking, and the challenges of altering the original plan for the internship	Qualitative: Case study	Internship at the Louisiana State University Libraries
<b>Positive outcomes of internships (4)</b>				
19	Baert et al. (2021)	Applicants with internship experience have, on average, a 12.6% higher probability of being invited to a job interview.	Quantitative: Randomized field experiment	1248 fictitious, but realistic, resumes to real job openings
20	Bolli et al. (2021)	Internships increase graduates' incomes and general human capital is the main mechanism rather than firm- or field-specific human capital, signaling, or screening.	Quantitative: Instrumental Variables (IV) approach	Three waves of the Swiss Graduate Survey
21	Downs et al. (2023)	Interns developed three meta-competencies: self-regulation, self-awareness, and self-direction. Our findings also highlight the role of socio-political dynamics of internship work in shaping students' experiences as an indicator of the changing world of work.	Qualitative: Thematic analysis	154 student-interns enrolled in a WBL module across three cohorts at a UK business school
22	Kim et al. (2022)	Students' participation in internships and the suitability and usefulness of the university's curriculum have a positive impact on employability.	Quantitative: Binary logistic regression	15,741 graduates from the 2019 Korean Graduates Occupational Mobility National Survey
<b>Negative outcomes of internships (2)</b>				
23	Di Meglio et al. (2022)	Internships open the door to the labor market, but there is weak evidence that they build a bridge towards long-term integration in terms of matching or wages.	Quantitative: Linear probability models and probit models	Spanish University Graduate Job Placement 2014 Survey
24	Odlin et al. (2022)	Levels and types of risk of harm to students in internships vary and the HEIs' strategic responsibilities should also vary accordingly.	Qualitative: Typology, Risk analysis	-

**Table 2. Twenty-nine studies in our review (continued)**

No.	Author	Key Results	Analytical Strategy	Data & Sample
Key factors that affect internship experience (5)				
25	Lin & Chen (2022)	Interns who had low proactive personality and highly trusted in a supervisor significantly strengthened the link between proactive personality and internship self-efficacy, which, in turn, induced better performance by enhanced intern self-efficacy.	Quantitative: Mediating effect analysis	158 interns recruited from hospitality-related departments of universities and colleges in Taiwan
26	Lin & Wang (2023)	Students receiving support from their communities are more likely to devote energy to their learning tasks and, consequently, develop a positive interpersonal relationship and present high social identification and trust.	Quantitative: Structural Equation Modeling	409 nursing interns who studied at seven medical universities or nursing colleges
27	Okolie (2022)	Support from faculty supervisors assigned to students during work-placement learning (WPL) may significantly strengthen the level of the students' WPL self-efficacy leading to higher readiness for school-to-work transition.	Quantitative: Moderated mediation model	Data collected from 291 undergraduate students undertaking work placement learning in 109 industries/firms
28	Sekiguchi et al. (2022)	Although organizational attractiveness on average declined after the internship, skill variety and feedback from employees in the internship job were positively related to perceived needs-supplies (NS) fit.	Quantitative: ex-ante and ex-post (i.e., pre-internship and post-internship) research design	Japanese undergraduate students in a university-sponsored internship program
29	Wolinsky-Nahmias & Auerbach (2022)	Students who were given more challenging tasks and opportunities to take initiatives were especially likely to gain a variety of personal, professional, and civic benefits with highest satisfaction.	Quantitative: Descriptive analysis, Correlation analysis	365 current and former students who participated in one of the internship programs

## Experiences (or not) of College Students on Their Internship Participation

A total of eighteen studies discussed college student experiences (or not) with various internships in diverse settings and unique landscapes, including other studies that mainly focused on inequitable opportunities to access internships and problems that exist after securing such internships. Two main themes were identified from the articles gathered: first theme is issues on equity and inclusion, and the second theme is various types of internships.

### Issues on Equity and Inclusion

Eight articles on internships highlight critical issues of equity and inclusion, such as low accessibility and racial and gender dynamics. When considering internships as an experience, the inability to participate should also be recognized. Studies identify significant accessibility gaps among various student demographics, highlighting the need for interventions to improve affordability and opportunities. Some studies highlight systemic barriers such as strong negative stereotypes affecting the internship experiences of students. Regarding analytical strategies, three studies used mixed methods, three studies used quantitative methods, and two studies used qualitative methods.

**Low accessibility.** Five studies highlight a critical gap in access to internships for various student demographics (Hora et al., 2021; 2022; Moss-Pech, 2021; Renschler et al., 2023; Shandra, 2022). Hora et al. (2021) present compelling evidence that internships often favor students who possess financial, social, and cultural resources, particularly in certain geographic areas and institutions. Another study, Hora et al. (2022) show that access to internship opportunities is influenced by a combination of factors such as race, gender, academic discipline, socioeconomic status, and internship market conditions. Both papers utilized mixed-methods by examining how the intersection of individual and contextual elements creates disparities in who benefits from internships (Hora et al., 2021; 2022). Shandra (2022) and Moss-Pech (2021) highlight persistent gaps in internship participation, revealing significant disadvantages for marginalized students, such as low-income and first-generation students, due to affordability issues. They also note disparities in certain majors, such as Communications and English, which have fewer available internship positions compared to Business and Engineering.

**Racial and gender dynamics.** Two studies examine the systemic challenges faced by students from underrepresented racial groups and women, often due to certain stereotypes and negative perceptions (Jaeger et al. 2023; Lapan & Smith, 2023). For example, Lapan and Smith (2023) found that internships generally reinforced women's career interests in fields like Computer Science. However, as specific gender being the majority, these interns encountered difficult gender dynamics which influenced their career choices. Jaeger et al. (2023) found that employers, especially those offering unpaid internships, were less likely to respond to applicants with names perceived as Black or from distant locations, believing they could not afford such opportunities. Additionally, Wojcik et al. (2023) revealed that special education teachers of color are more likely to pursue alternative route internships than traditional licensure programs compared to their white counterparts. This suggests that internships could serve as a pathway to increase diversity in the field.

## Various Types of Internships

The digital age, pandemic era, and globalized world have significantly impacted internships, and ten studies illustrate this evolution. Research highlights varying emphases across different majors and differing outcomes depending on the type of institution where internships are completed. Among 10 articles, six studies used qualitative methods, three studies used quantitative methods, and one study used mixed-methods.

**Virtual internships.** Four studies such as Jenkins et al. (2023), Reid et al. (2023), and Teng et al. (2022) find virtual internships in the pandemic era to be a highly effective component of both student learning and supervisory practice. These internships offer significant advantages, particularly for low-income students, by providing broader access to work experience opportunities and allowing interns to receive continuous and immediate feedback, which helps improve their confidence. For example, Wilson et al. (2023) conducted a case study on an internship at the Louisiana State University Libraries and showed that combining virtual and in-person formats can be efficient for academic librarians and student interns. The benefits from these internships include learning through multiple formats and enhanced networking opportunities. Regarding the methods used in these studies, one study used a survey, another used interviews, one conducted a case study, and another used mixed-methods to triangulate findings.

**Internships across different majors and institutional contexts.** Three studies of research across various majors—STEM, Political Science, Hospitality, Nursing, and Business—underscore the importance of internships in developing both discipline-specific skills and broader competencies like interpersonal and cognitive skills (Hearmann et al., 2021; Mensah et al., 2023; Ruppert et al., 2023). For example, Lin and Wang (2023) found that nursing students with high social interaction and supervisor support exhibit significantly higher performance levels during internships. In the Business sector, Hermann et al. (2021) explored the critical role of problem-based learning in internship experiences. The institutional context of internships also significantly influences their impact. One study shows that internships in private firms often yield positive employment outcomes for participants, while those in public organizations may present negative outcomes (Mato-Díaz & Escudero-Castillo, 2023).

**International internships.** Two studies on international internships highlight their distinct advantages over domestic ones, including the acquisition of practical skills and cultural knowledge. Di Pietro (2022) emphasizes that internships play a crucial role in fostering diverse cultural knowledge and language proficiency, effectively preparing students for globalized career paths. Furthermore, Snodgrass et al. (2021) focus on the cultural intelligence aspect within international internships. It underscores the idea that internships in international settings have the potential to enhance distinct interpersonal skills and intercultural competencies.

## Impact of Internships on Educational and Career-related Outcomes

Out of twenty-nine studies, six articles examined the effects and outcomes of internships related to educational and career development. Four studies highlighted positive effects of internships while two focused on negative issues related to internship outcomes. Similarly, four studies used quantitative methods and two studies used qualitative methods.

## Positive Outcomes of Internships

Research on the impact of internships shows a positive correlation with employment opportunities, skill development, and income levels. Methodologically rigorous quantitative approaches underpin these findings, enhancing their validity. Their findings show that internships contribute to significant skill development and higher income levels post-graduation, providing strong evidence for a causal relationship between internship participation and improved labor market outcomes.

**Employment opportunities.** The evidence presented by two studies, Baert et al. (2021) and Kim et al. (2022) reinforces the notion that internships significantly enhance the possibility for college students to successfully enter the job market. Baert et al. (2021) utilizes an experimental design to effectively examine the causal impact of internship experiences on securing better employment opportunities, thereby addressing a common limitation in related research concerning endogeneity. Additionally, Kim et al. (2022) supports the fact that participating in internships enhances the probability of undergraduate students in their first jobs, using cross-sectional panel data from South Korea and employing a binary logistic regression model.

**Skill development.** Two studies show that internships are crucial for developing meta-competencies—such as self-regulation, self-awareness, and self-direction—as well as specific technical and interpersonal skills. Downs et al. (2023) used reflective diaries to qualitatively assess improvements in meta-competencies, while Teng et al. (2022) employed a mixed-methods approach to demonstrate the enhancement of technical and communication skills through internships. Both studies showed statistically positive significant results, indicating that internships can improve the diverse skill sets required in the workplace.

**Higher income.** One study from Bolli et al. (2023) used an Instrumental Variables (IV) approach to rigorously examine the relationship between internships and subsequent earnings, addressing endogeneity concerns. Their findings suggest that internships enhance employment prospects and lead to higher income levels for participants, indicating tangible financial benefits. This study demonstrates that internships contribute to higher earnings, by improving human capital—such as developed skills and accumulated knowledge—rather than merely serving as a signaling effect.

## Negative Outcomes of Internships

Investigations into the negative effects of internships highlight concerns regarding their long-term impact on wages and the inherent risks associated with some internship experiences. While internships are widely recognized for their positive contributions to student development and early career trajectories (Baert et al., 2021; Teng et al., 2022), some studies also bring to the significant issues regarding their long-term efficacy and safety.

**Weak long-term effects on wages.** The research by Di Meglio et al. (2022), using data from the first Spanish University Graduate Job Placement 2014 Survey, differentiates between the short-term and long-term outcomes of internships. While confirming positive short-term effects on employment, the study notably finds that the long-term impact on wages is not significant. The findings indicate that the beneficial impacts of internships may not extend to lasting wage increases, suggesting a potential mismatch between the expectations and realities of these experiences. This suggests for their strategic design to foster enduring benefits rather than temporary gains.

**Risk management.** Odlin et al. (2022) shed light on the potential dangers associated with internships, ranging from moderate inconveniences to severe, life-threatening situations. They highlight the critical

importance of risk management in internships, pointing out that without adequate oversight and protective measures, internships can expose students to unnecessary and severe risks. It emphasizes the critical need for Higher Education Institutions (HEIs) to recognize and mitigate the risks involved, underscoring the strategic responsibilities of HEIs in safeguarding students and ensuring a safe learning environment.

## Key Factors that Affect Internship Experiences

Five studies examining the factors affecting internship experiences underscore the importance of supervisor support, social interaction, and challenging tasks in the success and value of internships for college students. Regarding analytical strategies, all studies used quantitative methods.

**Supervisor support.** Two studies by Lin & Chen (2022) and Okolie (2022) emphasize the pivotal role of supervisors in enriching internship experiences. Effective supervision, including providing trust and career-related advice, enhances students' self-efficacy, positively influencing their perceived and expected outcomes from the internships and the evaluations by supervisors. The findings suggest that support from supervisors creates a secure environment where interns can discuss their concerns with them, boosting their self-efficacy and expected outcomes, thereby underlining the critical impact of supervisor support on student outcomes during internships. Both studies identify self-efficacy as a crucial variable grounded in the Social Cognitive Career Theory (SCCT) and utilize quantitative methods such as interaction terms and Structural Equation Modeling (SEM) analysis.

**Social interaction.** Sekiguchi et al. (2023) and Lin & Wang (2023) examine the role of social interactions in internship settings. Their findings reveal that high social interaction among peer interns and a strong social presence in the internship environment significantly enhance positive experiences. Students with strong social skills and high self-esteem are more likely to invest effort in their tasks and build positive relationships. Improving social competencies is crucial in sectors with prevalent group-based activities, such as nursing. Interactions between supervisors and interns, such as providing and receiving feedback, are also significant to boost interns' performance.

**Challenging tasks.** Wolinsky-Nahmias & Auerbach (2022) indicate that internships incorporating challenging tasks lead to higher student satisfaction, improved employment prospects, and an enriched college experience. These tasks involve meaningful assignments that give students significant responsibilities, allowing them to take initiative, collaborate, and apply their academic knowledge. Participants in such internships frequently report acquiring new knowledge and skills and identifying their strengths and weaknesses. This underscores the value of designing internships that provide meaningful and challenging tasks for learning and professional growth.

## Conclusion

In this empirical literature review, we critically examined the multifaceted experiences of college students regarding their internship participation, the impact of these internships on educational and career-related outcomes, and the key factors that influence the overall internship experience. While the key limitation is the restricted time frame from 2021 to 2023, excluding studies published in 2024, it expands previous internship literature reviews (e.g., Hora et al., 2017; 2023) by offering new insights into recent key findings and future directions, particularly focusing on how the landscape and

perspectives have changed since the onset of the COVID-19 pandemic in 2020. In this final section, we provide a summary of the findings, along with recommendations for future research and guidance.

## **Equity in Internship Opportunities and the Evolving Landscape of Internships**

College students' internship experiences should not be confined to the interns but should also consider the non-interns who were unable to secure opportunities. Some students face substantial barriers to accessing internships, such as socioeconomic constraints, limited information and connections, and geographic limitations (Hora et al., 2022; Shandra, 2022). Even those who successfully manage to secure internships may encounter diverse situations influenced by their workplace environment, their academic disciplines, the institutions they attend, and the people they interact with (Lapan & Smith, 2023; Moss-Pech, 2021). The rise of virtual internships due to the pandemic and digital era, along with the importance of intercultural competencies in a globalized world, illustrates how internships are evolving (Reid et al., 2023). These studies advocate for a strategic approach to internships that considers the unique needs and opportunities of each format and setting, aiming to equip students with the comprehensive skills and necessary experiences.

### **Mixed Outcomes and the Importance of Holistic Approaches**

It is crucial to acknowledge that internships are not a silver bullet solution; their outcomes can be both positive and negative. On the positive side, internships can enhance professional skills, improve employment opportunities, and enhance income level (Baert et al., 2021; Bolli et al., 2021). However, the literature also presents a distinct view of negative outcomes, noting the weak evidence of internships having long-term effects on income and existing risks that are exposed to students (Di Meglio et al., 2022; Odlin et al., 2022). These studies call for a more holistic approach to not only maximize immediate learning and career-related benefits but also ensure the long-term well-being and safety of participants. These mixed outcomes highlight the necessity of understanding and addressing the complexities of internship outcomes to ensure they can be beneficial for all students.

### **Key Factors to Enhance Internship Quality**

Empirical studies have identified key factors that can enhance positive outcomes from internships such as effective supervisor support, meaningful and challenging tasks, and robust social interactions. Supervisor support, including trust and career-related advice, significantly boosts interns' self-efficacy and overall satisfaction (Lin & Chen, 2022). Engaging in meaningful and challenging tasks allows students to apply their academic knowledge, develop new skills, and gain confidence (Wolinsky-Nahmias & Auerbach, 2022). Strong social interactions, both with peers and supervisors, create a supportive environment that enhances learning and professional development (Lin & Wang, 2023). This also means that inadequate supervision, unchallenging tasks, or hostile work environments, can lead to frustration and disengagement.

### **Recommendations for Future Research and Practice**

Future research and practical efforts should address barriers preventing students from participating in internships. Understanding these barriers is crucial, as designing quality programs is ineffective if access is limited. Tailored interventions are necessary to ensure inclusivity, particularly for low-income and first-generation students, who tend to face socioeconomic constraints and geographical issues, and for students in less marketable majors, who may struggle with a lack of available positions (Hora et al.,

2022; Moss-Pech, 2021). Studies on how individual and contextual factors intersect could be further examined, highlighting the need for detailed political and institutional policies that better support diverse student populations.

Secondly, while recognizing the positive outcomes of internships, it is equally important to acknowledge and address the possible drawbacks like weak long-term benefits or unsafe physical and emotional environment. Internships should not be blindly celebrated but instead, a balanced view is needed. Since interns are in the process of navigating the complexities of transitioning from school to work, it may leave some young individuals in a vulnerable position (Hodkinson & Sparkes, 1997). Ensuring students' safety, including addressing legal and ethical issues, is essential before rigorously expanding internships (Hora et al., 2017). Additionally, internship studies should attempt to examine and capture various tangible outcomes beyond economic benefits. Since the onset of COVID-19, the focus on students' well-being and social and emotional outcomes has intensified (e.g., Hora et al., 2023). Future research should delve deeper into incorporating non-financial aspects to ensure holistic development and quality experiences for interns.

Thirdly, researchers should explore how to better understand and address the new opportunities and challenges presented by the evolving and multifaceted landscape of internships. For example, post-pandemic and with technological advancement, virtual internships offer flexible, inclusive models benefiting diverse student populations (Teng et al., 2022). This highlights the importance of designing effective programs to ensure positive student experiences in the new format of internships. Analyzing external effects on private and public sector internships and comparing supply-demand issues and required skills across disciplines, underscores the critical role of context and adaptable curriculum design in maximizing outcomes (Ruppert et al., 2023).

Finally, enhancing positive outcomes from internships requires a comprehensive perspective, considering where interns work, the workplace environment, who they work with and get feedback from, and the tasks they perform. One of the key elements is social interaction; the network of peers and supervisors, which is pivotal for designing effective internship programs (Sekiguchi et al., 2022). While virtual internships increased accessibility for some, they also introduced new possible issues, such as inconsistent support and engagement from supervisors (Jenkins et al., 2023). Future research should examine institutional, environmental, and sociocultural factors in detail, considering how these elements interact to influence internship outcomes in evolving environments.

Internship experiences are highly variable, with factors such as accessibility, the presence of challenging tasks, and the quality of supervision playing critical roles in shaping these experiences. While internships offer valuable opportunities for practical skill development and professional networking, they also present challenges related to equity, inclusion, and risk management. For internships to fully realize their potential, they must be thoughtfully designed and managed, emphasizing inclusivity, safety, and meaningful engagement. This review highlights the need for ongoing research and dialogue among educators, employers, and policymakers to transform internships into truly accessible, equitable, and beneficial experiences for all students.



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The mission of The Center for Research on College-Workforce Transitions (CCWT) is to conduct and support research, critical policy analysis, and public dialogue on student experiences with the transition from college to the workforce in order to inform policies, programs, and practices that promote academic and career success for all learners. This work is made possible by the generous support of the Bill & Melinda Gates Foundation, the National Science Foundation and Strada Education Foundation.



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**Suggested citation:**

Song, H & Hora, M.T. (2024). A Literature Review of the Research on College Internships from 2021-2023: Focusing on Equity and Quality During the Pandemic Era. Center for Research on College-Workforce Transitions. University of Wisconsin–Madison, Division of Continuing Studies.

**Keywords:**

College Internships, Post-pandemic, Accessibility, Racial and Gender Dynamics, Virtual Internships, Labor Market Outcomes, Supervisor Support, Task Complexity



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